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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/732,788

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EXAMINER

VUONG, QUOCHIE B

ART UNIT

PAPER NUMBER

2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/732,788	Applicant(s) LAU, SAMUEL	
	Examiner Quochien B. Vuong	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 03/11/2005, 12/05/2005, and 01/23/2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 6, 8, 12-18, 21-24, 27, and 33-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimoda et al. (US 7,203,517).

Regarding claim 1, Shimoda et al. disclose a method of operating a mobile network device (column 1, line 58 – column 2, line 16), comprising: detecting a speed of the mobile network device (column 7, lines 27-31); ascertaining one or more values of one or more operating characteristics of one or more interfaces of the mobile network device (column 7, lines 9-67 disclose that the device can be connected to several different access networks via different interfaces), the one or more values

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corresponding to the speed of the mobile network device (column 7, lines 9-67 disclose that the priorities of interfaces changed according to the speed of the device, thus the values are the priorities and whether the interface is suitable or not); and selecting one of the interfaces having a desired set of values of the operating characteristics at the speed of the mobile network device (figures 6a-b; column 7, lines 32-67 discloses that at high speed portable telephone has the highest priority while wireless LAN has the lowest priority).

As to claim 2, Shimoda et al. disclose applying the set of values of the operating characteristics to the selected interface of the mobile network device (column 7, lines 32-67).

As to claim 6, Shimoda et al. disclose transmitting one or more packets via the selected interface (column 3, lines 5-16).

As to claim 8, Shimoda et al. disclose wherein detecting a speed of the mobile network device is performed by a GPS (column 5, lines 39-64).

As to claim 12, Shimoda et al. disclose wherein ascertaining one or more values of one or more operating characteristics of one or more interfaces of the mobile network device comprises: ascertaining the values from a profile indicating one or more values of the one or more operating characteristics of the one or more interfaces of the mobile network device at one or more speeds at which the mobile network device is capable of operating (column 7, lines 9-67)

As to claim 13, Shimoda et al. disclose wherein the values of the one or more operating characteristics of the one or more interfaces correspond to values of the one

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or more operating characteristics of one or more devices to which the interfaces are to connect (column 7, lines 9-67).

As to claim 14, Shimoda et al. disclose wherein the devices are wireless device (column 3, lines 5-10).

As to claim 15, Shimoda et al. disclose wherein the values of the one or more operating characteristics of one of the interfaces corresponds to values of the one or more operating characteristics of a device to which the interface is to connect (column 7, lines 9-67).

As to claim 16, Shimoda et al. disclose wherein the device is a wireless device (column 3, lines 5-10).

As to claim 17, Shimoda et al. disclose an Access Point for access the wireless LAN (column 3, line 65 – column 4, line 11).

As to claim 18, Shimoda et al. disclose wherein the one or more speeds include a first speed at which the mobile network device is non-mobile and one or more additional speeds at which the mobile network device is capable of operating while traveling (column 7, lines 9-67).

As to claim 21, Shimoda et al. disclose wherein the profile includes one or more values of the one or more operating characteristics of the one or more interfaces of the mobile network device at a plurality of sets of speeds, each of the sets of speeds including one or more speeds at which the mobile network device is capable of operating (figure 6b; column 7, lines 9-67).

As to claim 22, Shimoda et al. disclose wherein one of the plurality of sets of speeds includes a first set at which the mobile network device is non-mobile and one or more additional sets at which the mobile network device is capable of operating while traveling (figure 6b; column 7, lines 9-67).

As to claim 23, Shimoda et al. disclose configuring the mobile network device with the profile, the profile indicating one or more values of the one or more operating characteristics of the one or more interfaces of the mobile network device in relation to one or more speeds at which the mobile network device is capable of operating (figure 6b; column 7, lines 9-67).

As to claim 24, Shimoda et al. disclose wherein the one or more speeds includes a first speed at which the mobile network device is non-mobile and one or more additional speeds at which the mobile network device is capable of operating while traveling (figure 6b; column 7, lines 9-67).

As to claim 27, Shimoda et al. disclose modifying one or more of the values of one or more of the operating characteristics of one or more of the interfaces of the mobile network device that are present at one or more speeds of the mobile network device (figure 6b; column 7, lines 9-67).

Regarding claims 33-36, the claims are rejected with the same reasons set forth to claim 1 above, since claims 33-36 recite apparatuses or computer readable mediums corresponding to method claim 1.

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4. Claims 29-31, 37, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchida (US 6,618,596).

Regarding claims 29, 37, and 38, Uchida discloses a method and apparatus of operating a mobile network device (column 1, line 58 – column 2, line 7), comprising: detecting a speed of the mobile network device (column 3, line 62 – column 4, line 7); ascertaining one or more values of one or more operating characteristics of one or more interfaces of the mobile network device, the one or more values corresponding to the speed of the mobile network device (column 4, lines 8-29); and applying the values of the operating characteristics to the interface of the mobile network device (figures 2 and 4; column 4, lines 8-29).

As to claim 30, Uchida discloses wherein the operating characteristics include at least one of bandwidth, quality of service method, and percentage or fraction of the bandwidth allocated to one or more types of traffic (column 4, lines 8-29).

As to claim 31, Uchida discloses wherein the types of traffic includes at least one of video and voice traffic (column 4, lines 8-29).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5, 7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda et al. in view of Johnson et al. (US 6,625,135).

As to claim 3, Shimoda et al. disclose the method of claim 1 above. Shimoda et al. do not specifically disclose registering with a Home Agent via the selected interface. However, Johnson et al. disclose the mobile network device registering with a Home Agent in a wireless LAN and WAN (column 5, lines 39-49). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the step of registering with a Home Agent via the selected interface to keep track of the location of the mobile network device and route packet to the mobile network device.

As to claim 4, Shimoda et al. disclose transmitting one or more packets via the selected interface (column 3, lines 5-16).

As to claim 5, Johnson et al. disclose receiving one or more packets from the Home Agent via the selected interface (column 3, lines 50-53).

As to claim 7, Shimoda et al. disclose the method of claim 1 above. Shimoda et al. do not specifically disclose receiving one or more packets from a Home Agent via the selected interface. However, Johnson et al. disclose the mobile network device registering with a Home Agent in a wireless LAN and WAN (column 5, lines 39-49), and receiving one or more packets from a Home Agent (column 3, lines 50-53). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the step of receiving one or more packets from a Home Agent via

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the selected interface in order for the mobile network device to receive the packets when it away from home.

As to claim 9, Shimoda et al. disclose the method of claim 1 above. Shimoda et al. do not specifically disclose wherein the mobile network device is a Mobile Router. However, Johnson et al. (figure 12) disclose a mobile network device (78) as a Mobile Router in wireless LAN and WAN (column 16, lines 19-40). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the Mobile Router of Johnson et al. to the mobile network device of Shimoda et al. for routing packets in the wireless LAN and WAN.

7. Claims 10, 11, 19, 20, 25, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda et al. in view of Uchida.

As to claims 10, 19, and 25, Shimoda et al. do not specifically disclose wherein the operating characteristics include at least one of bandwidth, quality of service, and percentage or fraction of the bandwidth allocated to one or more types of traffic. However, Uchida disclose the operating characteristics include at least one of bandwidth, quality of service, and percentage or fraction of the bandwidth allocated to one or more types of traffic (column 3, line 62 – column 4, line 29, disclose operating characteristics including quality of service as data transfer rate varying with the speed of the mobile network device). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the operating

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characteristics including quality of service of Uchida to the method of Shimoda et al. in order to provide a proper data transfer rate for the mobile network device.

As to claims 11, 20, and 26, Shimoda et al. disclose wherein the one or more types of traffic include voice traffic and video traffic (column 3, lines 5-22).

As to claim 28, Shimoda et al. do not specifically disclose wherein configuring comprises: setting the values of the operating characteristics of one of the interfaces of the mobile network device such that the values correspond to operating characteristics of a device to which the interface of the mobile network device is connected. However, Uchida disclose setting the values of the operating characteristics of one of the interfaces of the mobile network device such that the values correspond to operating characteristics of a device to which the interface of the mobile network device is connected (column 3, line 62 – column 4, line 29, disclose setting the values of the operating characteristics as data transfer rate varying with the speed of the mobile network device). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the setting the values of the operating characteristics of one of the interfaces of the mobile network device of Uchida to the method of Shimoda et al. in order to provide a proper data transfer rate for the mobile network device.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida in view of Johnson et al.

As to claim 32, Uchida discloses the method of claim 29 above. Uchida does not specifically disclose wherein the mobile network device is a Mobile Router. However, Johnson et al. (figure 12) disclose a mobile network device (78) as a Mobile Router in wireless LAN and WAN (column 16, lines 19-40). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the Mobile Router of Johnson et al. to the mobile network device of Uchida for routing packets in the wireless LAN and WAN.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McKenna et al. (US 6,829,486) disclose communique system for combined cellular and wireline communication networks.

Kamaki et al. (US 7,151,758) disclose router device, datagram transfer method and communication system.

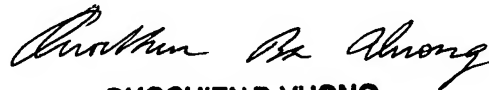
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quochien B. Vuong
July 7, 2007.



QUOCHIE B. VUONG
PRIMARY EXAMINER